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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,306	09/19/2001	Futoshi Kuniyoshi	743421-0043	1720
22204	7590	04/20/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			SHEEHAN, JOHN P	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/955,306	KUNIYOSHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	John P. Sheehan	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 January 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 11, 12, 14 and 15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 11, 12, 14 and 15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Mikio, cited by applicants in the IDS submitted March 15, 2002).

4. Mikio teaches a specific example of a R-Fe-B rare earth magnet having an average crystal grain size of 4  $\mu\text{m}$  which is encompassed by applicants' claim 12, an oxygen concentration of 2020 ppm and a nitrogen content of 500 ppm which are encompassed by applicants' claims 11, 12, 14 and 15 (Mikio, see English language translation attached to this Office action, paragraph 0016). Mikio's specific example alloy contains 5 ppm hydrogen (see Mikio's paragraph 0016). The proportions of the alloy composition of the example alloy taught in Mikio's paragraph 0016 is set forth in atomic percents, however simply converting the atomic percents to weight percent

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reveals that the alloy contains 29.6 weight percent rare earth element which is encompassed by applicants claims 14 and 15.

The claims and Mikio's specific example alloy differ in that Mikio's example alloy contains 5 ppm hydrogen whereas the instant claims require a minimum of 10 ppm hydrogen. Further, Mikio does not teach the process step recited in product by process claims 11, 12, 14 and 15.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Mikio's example alloy differs from applicants claims alloy only in the amount of hydrogen, Mikio's example alloy contains 5 ppm hydrogen and the instant claims require a minimum of 10 ppm hydrogen, and thus so closely approximates the instantly claimed alloy that one of ordinary skill in the art would have expected Mikio's example alloy and the claimed alloys to have the same properties, Titanium Metals v. Banner, 227 USPQ 773 and MPEP 2144.05. Further, the process step recited in product by process claims 11, 12, 14 and 15 does not necessarily lend patentability to the claimed product, MPEP 2113.

5. Claims 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Document No. 93/20567.

PCT '567 teaches a R-Fe-B rare earth magnet containing, in weight percent, 0.01 to 2.0 % (100 to 20,000 ppm) oxygen, 0.003 to 5 % (30 to 50,000 ppm) nitrogen, 0.001 to 1.0 % (10 to 10,000 ppm) hydrogen and 8 to 42 % rare earth metal (see

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English language abstract). This R-Fe-B rare earth magnet composition overlaps the composition recited in applicants' claims.

The claims and PCT '567 differ in that PCT '567 does not teach the exact same proportions as recited in applicants' claims nor the process step recited in product by process the claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloy proportions taught by PCT '567 overlap the instantly claimed proportions and therefore are considered to establish a *prima facie* case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05. Further, the process step recited in instant product by process claims does not necessarily lend patentability to the claimed product, MPEP 2113.

***Response to Arguments***

6. Applicant's arguments filed January 27, 2004 have been fully considered but they are not persuasive.

Applicants' argue that the structure implied by the process should be considered by the Examiner in assessing patentability and that "Applicants are of the opinion that the manufacturing process steps for the rare earth magnets presently claimed would impart distinctive structural characteristics to the final product which...further provide unexpected improvement in the magnet properties". The Examiner is not persuaded. Applicants have not specifically pointed out what structural difference there is allegedly implied by the process limitation, "wherein the R-Fe-B rare earth magnet is manufactured of a material by embrittling an R-Fe-B alloy by hydrogen occlusion", recited in applicants' claims that distinguishes the claimed product from the product taught by the reference. Further, applicants have not presented any evidence to support their allegation of "unexpected improvement in magnet properties" "It is well settled that unexpected results must be established by factual evidence. Mere argument or conclusory statements in the specification do not suffice." In re Deblauwe, 222 USPQ 191, 196 (Fed. Cir. 1984). Mere lawyer's arguments and conclusory statements in the specification, unsupported by objective evidence, are insufficient to establish unexpected results." In re Wood, Whittaker, Stirling and Ohta, 199 USPQ 137, 140 (CCPA 1978).

7. Applicants referring the Examiner to Tables 3 and 4 of the specification, argue that applicants' disclosed specific sintering sequence that is, sintering at two different

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temperatures reduces the hydrogen content to the instantly claimed levels (page 3 and 4 of applicants' response). First, it is noted that the claims do not recite any sintering steps, therefore applicants' arguments regarding a two sintering step process are not persuasive. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Secondly, applicants' do not point to the specific data in these tables that applicants are relying nor do applicants explain what the specific data shows. Applicants' general reference to the data in the specification with no explanation of what facts or data applicants are relying on is not persuasive, *In re Borkowski* 184 USPQ 29.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps  
April 15, 2004